Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Hour: 3 6 8

**The Bubble Lab**

Please use your lab notebooks to complete the following lab. We will be following the scientific lab write-up previously provided to you. We will not be including an abstract in this particular lab write-up. All other sections should be included

**Question:** What ratio of dish soap to water makes the best bubbles?

**Abstract:** Not required for this assignment.

**Title:** Your lab’s title should include the relationship between the independent and dependent variable and express exactly what the reader would learn about if they choose to read your scientific paper.

**Hypothesis:** Make a prediction of an answer to the question being posed in one sentence. Please remember that hypotheses are often written in “if…then…” format.

**Introduction:** Introduce the reader to the topic being investigated. You may want to do some research to determine the best prediction of an answer to the question being posed. You should also consider the question “what is the best bubble.” This will need to be defined before the question can be answered. Discuss why this question might be important.

**Materials:** Make a list of all materials, scientific and non-scientific,being used in the experiment. Remember, it should be complete enough that another person could replicate the experiment based on this list.

**Procedure:** You will need to devise a procedure that you feel best tests the hypothesis you have posited. This will also need to account for measuring what you have determined is the best bubble. The procedure should be written in a numerical list that would allow the reader to exactly replicate the experiment. Remember to make your steps small and easy to follow.

**Data:** The data section is where you will collect information as it occurs. You should perform several trials. It is a good idea to have charts prepared ahead of time to record your data in an orderly way. However, the data section is for the experimenter and is recorded as it happens. Therefore, this section is often less structured than the others.

**Results:** In this section the data should be organized in a meaningful way for the reader. For this assignment, this will mean creating a graph followed by a brief description of what the graph depicts. Remember to describe just the facts of what the graph depicts. What those facts mean will be described later in the conclusion section. Also remember to choose the graph that best represents the kind of data that you have collected.

**Conclusion:** The conclusion should be a discussion of what the results mean. Discuss if your hypothesis has been supported or not and why this might be. Relate your conclusions to what you discussed in your introduction about why this experiment is important. You should discuss any potential errors in the experiment or confounding variables. Your conclusion may also include how the information gathered in the experiment will affect future endeavors.

